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## Abstract

An exhaust gas sensor (1) for detecting a gas component in the exhaust gas of an internal combustion engine, having a control and evaluation unit and a sensor unit (2) with an electrode structure (20) with a first terminal (4) and a second terminal (5), is proposed. Furthermore, a method for operating an exhaust sensor (1) to determine the concentration of a component in the exhaust gas of an internal combustion engine is proposed, the exhaust gas sensor (1) having a unit (2) gas-sensitive sensor with an electrode structure (20) with a first terminal (4) and with a second terminal (5).

According to the invention, the control and evaluation unit applies a bias voltage (17) to the first terminal (4) and/or the second terminal (5) of the electrode structure (20), it being possible for the level of the voltage (17) to be set in dependence on characteristic of the sensor and/or in dependence on a loading of the sensor. For the method, it is provided that a bias voltage (17) is applied to the first terminal (4) and/or to the second terminal (5) of the electrode structure (20), the level of the bias voltage (17) being set in dependence on a characteristic of the sensor and/or in dependence on a loading of the sensor.

Figure 1